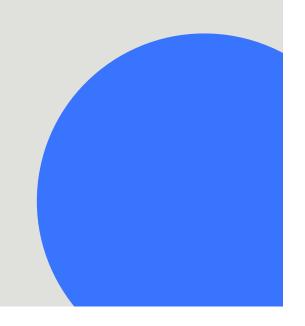Fact sheet

Preparing for 8-digit BINs

An overview of Cybersource and Authorize.net readiness to support new ISO standards

Challenge
In 2015, the International Organization for Standardization (ISO) announced the expansion of Bank Identification Number (BIN) length from six to eight digits to ensure an adequate supply of global BINs to match the rapid growth of the payments industry.

Response
Cybersource and Authorize.net have taken steps to assess and support this new ISO standard by the April 2022 deadline. We have actively analyzed the implications to our solutions and planned for necessary changes.

Our commitment
We are committed to developing best-in-class payment management solutions and look forward to providing our valued customers around the globe with a seamless experience as the payments industry migrates to this new standard.

Focus areas
Cybersource and Authorize.net product and systems readiness

- BIN lookup capabilities will be updated to support the new, extended ranges, per PCI compliance standards

- To support actions including transaction searches and reporting, transaction databases will be enhanced to accommodate data attributes

- Internal services that consume BIN lookup results will be able to successfully interface with updated lookup and data storage utilities

- Field names will be updated in accordance with revised scheme taxonomies

What to expect
Cybersource and Authorize.net objectives and action plans

- All internal systems that are dependent on BIN data are expected to be updated to support desired testing needs as of March 9, 2022

- While Cybersource and Authorize.net may leverage BIN data for internal product operations, no expected impact to standard payment transaction processing is anticipated

- Client-facing displays and interfaces (e.g., Business Center merchant reporting, transaction search, and most Decision Manager fraud tools) will continue to operate on first six + last four formatting unless otherwise communicated

cybersource
A Visa Solution

For questions regarding specific solutions, including 8-digit BIN support, please contact Cybersource sales at 1-800-530-9095 or Authorize.net sales at 1-888-323-4289.

Find out more about Cybersource and Authorize.net solutions and what they can do for you at www.cybersource.com and www.authorize.net.

8-digit BIN impact on specific Cybersource and Authorize.net products

Cybersource Payment Gateway

All 8-digit BIN enhancements are internal and will be transparent to merchants. No action required.

Digital Accept

All Digital Accept (secure acceptance) products will support 8-digit BINs. Merchants currently accessing the BIN Lookup API will need to migrate to the new REST API.

Business tools - reporting

The BIN field in reporting consists of only six digits. As this field does not contain a proper BIN, it will be renamed to Account Prefix. No action required.

Partner Risk Controls (PaRC)

Cybersource will update existing 6-digit BIN ranges by appending numerical suffixes (ranging from 00-99). Subsequently, partners should revisit these existing BIN ranges to confirm the continued blocking of these updated 8-digit BINs. All future BIN ranges added to the BIN Management and BIN On-Us Management screens (for blocking decisions) should be in eight digits.

Cybersource BIN Lookup Service

Merchants integrated into BIN Lookup Service today are required to migrate to the new BIN Lookup Service REST API to obtain 8-digit BIN results.

Visa Platform Connect

There is no anticipated impact to the TC33A file for customers using Visa Platform Connect. These files contain full Primary Account Numbers (PANs) and will not make any distinctions related to issuer BIN.

Fraud and risk management

The AL/ML platform that powers Decision Manager (DM) and Fraud Management Essentials (FME) will be extended to handle 8-digit BINs in modeling and transaction risk scoring. BINs shown in DM and FME screens will have the last two digits masked, following the standards of the rest of the Business Center. Users may add 8-digit BINs to negative lists.

Preparing for 8-digit BIN migration

The first step to prepare for the migration to 8-digit issuing BINs is to **analyze impacts to your organization**.

It is highly recommending to assemble a cross-functional project team to **consider impacts comprehensively.**

For example, impacts from expanding the issuing BIN may occur in billing, reporting, user interfaces, application interfaces, enrollment forms, or anything that currently uses the 6-digit ISO BIN.

8-digit BIN testing

Cybersource Payment Gateway

Testing is not required.

- A support page has the payments transaction responses using trigger amounts.
- Test cards (6 Visa card numbers, 3 Mastercard numbers, 1 American Express number, 1 Discover number, 1 JCB number, 2 Maestro international numbers, 3 Maestro UK domestic numbers, 1 UATP number.
- Sample Request/Response using JSON.
- SCMP/SOAP! user documents.

Payments: Union Pay - CUP/ITMX/RUPAY/EFTPOS

Testing is not required, but will be available in March 2022 for authorization, capture, reversal, refund, credit, void, and BIN-based routing (EFTPOS, ITMX)

Fraud and risk management

Testing for Decision Manager (DM) and Fraud Management Essentials (FME):

- The platform should behave normally if the payment instruction is PAN with an 8-digit BIN
- User should be able to input an 8-digit BIN on List Addition
- DM and FME should decision on a transaction if the BIN is on the negative or review lists
- API should be able to submit an 8-digit BIN through Card BIN API field

Testing for FME:

- *List Addition*: user adds 6-digit or 8-digit BIN to a list
- *List Management*: user can search for a 6-digit or 8-digit BIN; user can filter the result set by only the first six digits, because result set filtering is a client-side function, and the last two digits of an 8-digit BIN will be masked
- *Order Search*: user can filter the result set by only the first six digits, because result set filtering is a client-side function, and the last two digits of an 8-digit BIN will be masked
- *Audit Search*: list addition actions will surface in Audit Search with unmasked BINs because there is no way to link these BINs to an individual transaction and find more info about the PAN, such as the last four digits.

Partner Risk Controls (PaRC)

Testing is not required, but the following is available to be tested for 8-digit support:

- BIN Management
- BIN On-Us Management
- Risk Dashboard
- Audit Search

Business tools

Business tool testing is not required, but the following is available:

Transaction Search:

- Enter the first six digits of an 8-digit BIN card in "Account Prefix" filter
- Validate that the six digits of an 8-digit BIN card is displaying transaction details page

Virtual Terminal:

- Process a transaction by entering an 8-digit BIN card in the card number field
- Demonstrate that the card type field is populated

Reporting:

- No use cases change; change is text label only

Frequently asked questions - preparing for 8-digit BINs

What Cybersource requirements must be followed to adopt the new 8-digit ISO BIN standard?
While Cybersource and Authorize.net may leverage BIN data for internal product operations, there will be no expected impact to standard payment transaction processing. Other services, such as BIN Lookup Service, may have more direct impacts to consider but will be specifically addressed, as needed.

For example, those merchants currently leveraging Cybersource BIN Lookup Service will be required to migrate to the new BIN Lookup Service REST API to obtain 8-digit BIN results. However, specific communications will be provided to those merchants with more detailed instructions.

What schemes are going to 8-digit in April 2022?
As of the publication of this document, we understand that Visa, Mastercard, UnionPay, and Discover/Diner's Club will adopt and gradually migrate to 8-digit BINs.

What will happen to the existing 6-digit issuing BINs?
Existing BINs will remain six digits unless or until an issuer chooses to migrate them to eight digits. Visa is allowing users the discretion to expand any or all of their issuing BINs to eight digits and to set their own timeline for the expansion, Issuers are highly encouraged to migrate their current 6-digit issuing BINs to the 8-digit ISO standard.

What are the consequences if a processor of acquirer have not made changes necessary to work with 8-digit BINs by April 2022?
Impacts may vary depending upon how you interface with your processor and what requirements they may have in place. Please check with your respective processor or acquirer to validate any potential impacts they may expect for their merchant customers. Cybersource and Authorize.net do not anticipate transaction processing impacts via our connected processors.

If I am processing card present transactions via Cybersource or Authorize.net, are there any additional considerations I should account for?
No, there are no expected external impacts to Cybersource or Authorize.net card present solutions.

Will the card schemes allow waivers for adoption of the new 8-digit standard as of the April 2022 Business Enhancement Release (BER)?
No, as this is an industry-wide migration, we are not expecting schemes to offer waivers.

Do cardholders need to update merchants that manage recurring payments that the issuing BIN number is expanding?
No, Since Primary Account Numbers (PANs) are not changing, there is no need to alert recurring merchants. Acquirers should work with merchants to ensure their infrastructure is ready to support the new standard. Cardholders should not need to be informed.

Do merchants need to reprovision all existing tokens due to the change in issuing BIN length?
No. Tokens will remain 16 digits and are not impacted by the expansion of the BIN length.

Is Cybersource Customer Acceptance System (CAS) testing an option for testing these changes?
Yes. The CAS system is anticipated to be available for testing on March 9, 2022.

When will Cybersource/Authorize.net publish technical documentation for 8-digit BINs?
We anticipate that our documentation will be updated with relevant technical information and updated naming conventions by March 9, 2022.

Frequently asked questions - preparing for eight-digit BINs (contd.)

For acquirers who use Visa Platform Connect, will there be any changes related to TC33A files and are there development tasks or changes that the acquirer needs to make?
No. There is no anticipated impact to the TC33A file. These files contain full PAN and will not make any distinctions related to issuer BIN.

Is there a change in Payment Card Industry Data Security Standards (PCI DSS) requirements for masking or truncating data?
The PCI Security Standards Council blog, "8-digit BINs and PCI DSS: What You Need to Know," September 2, 2021 and the PCI SSC FAQ resource for specific details. FAQ #1492 explains how to meet the PCI DSS masking and truncation requirements when using 8-digit BINs. FAQ #1091 identifies the acceptable truncation formats as defined by each payment brand. Formats for 8-digit BINs have been regularly updated since this FAQ was originally published in 2017.

PCI currently outlines impacts as follows:

- *Data presented on screens and reports:* provisions allow users with a legitimate business need to see any or all of the PAN digits

- *Data at rest:* PCI allows exposure of up to, but no more than, the first six digits and any other four digits in a 16-digit PAN. Clients using truncation as their only method of complying with the PCI requirement for protesting data at rest, who would like to expose the full 8-digit BIN as well as the last four digits, need to add one or more of the other acceptable methods for data protection, such as encryption, hashing, or tokenization.

As a partner, do I need to change anything on my end within Partner Risk Controls (PaRC) with regards to BIN Management or BIN On-Us Management?
Initially, Cybersource will automatically update all existing 6-digit BIN ranges under BIN Management and BIN On-Us Management to eight digits by appending a numerical suffix ranging from 00-99 (e.g., an existing BIN range starting with 123456 and ending with 123456 will be updated to a BIN range starting with 12345600 and ending with 12345699).

Subsequently, partners should review those updated BINs under BIN Management and BIN On-Us Management to confirm which of these BINs they would like to continue blocking. All BINs added in the future should use the 8-digit BIN format.